

12/17/01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

DEC 14 2001

1646  
TECH CENTER 1600/2900

Applicant: Darrell H. Carney  
Application No.: 09/904,090 Group Art Unit:  
Filed: July 12, 2001 Examiner: Not assigned  
Title: Methods of Therapy with Thrombin Derived Peptides

RECEIVED  
DEC 11 2001  
PATENT & TRADEMARK OFFICE  
U.S. DEPARTMENT OF COMMERCE  
10/12/01 Sandra Brigham  
Sandra Brigham  
Typed or printed name of person signing certificate

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231	
on	10/12/01
Date	Sandra Brigham
Signature	
Typed or printed name of person signing certificate	

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

This Information Disclosure Statement is submitted:

under 37 CFR 1.129(a), or  
(First/Second submission after Final Rejection)

under 37 CFR 1.97(b), or  
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).

under 37 CFR 1.97(c) together with either:  
 a Statement under 37 CFR 1.97(e), as checked below, or  
 a \$180.00 fee under 37 CFR 1.17(p), or  
(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)

under 37 CFR 1.97(d) together with:  
 a Statement under 37 CFR 1.97(e), as checked below, and  
 a \$180.00 fee under 37 CFR 1.17(p), or  
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)

under 37 CFR 1.97(i):  
Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.  
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- [ ] Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- [ ] No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- [ ] Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

[X] Enclosed herewith is form PTO-1449:

- [X] Copies of the cited references are enclosed.
- [ ] Copies of cited references are enclosed except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
- [ ] The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- [ ] The "concise explanation" requirement (non-English references) for reference(s) [ ] under 37 CFR 1.98(a)(3) is satisfied by:
  - [ ] the explanation provided on the attached sheet.
  - [ ] the explanation provided in the Specification.
  - [ ] submission of the enclosed International Search Report.
  - [ ] the enclosed English language abstract.

[ ] Applicant requests that the following non-published pending applications be considered:

Examiner's  
Initials

\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_ Examiner

\_\_\_\_ Date

[ ] A copy of each above-cited application, including the current claims, is enclosed.

[ ] A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- [ ] A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- [ ] Please charge Deposit Account 08-0380 in the amount of \$[ ]. A copy of this Statement is enclosed.
- [X] Please charge any deficiency in fees and credit any overpayment to Deposit Account 08-0380.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By



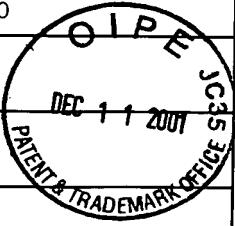
Steven G. Davis  
Registration No.: 39,652  
Telephone: (978) 341-0036  
Facsimile: (978) 341-0136

Concord, MA 01742-9133

Dated:

*October 21, 2001*

PTO-1449 REPRODUCED				ATTORNEY DOCKET NO. 3033.1000-001	APPLICATION NO. 09/904,090
INFORMATION DISCLOSURE CITATION IN AN APPLICATION				APPLICANT Darrell H. Carney	
October 25, 2001  (Use several sheets if necessary)				FILING DATE July 12, 2001	GROUP 1646



## U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	RECEIVED NAME DEC 14 2001	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
	AA	5,352,664	10/04/94	Carney TECH CENTER 1600/2900	514	13	
	AB	5,500,412	03/19/96	Carney et al.	514	13	

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES      NO
	AL						
	AM						

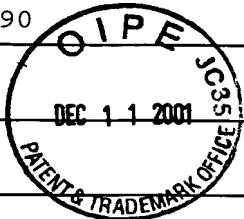
## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AR	Hendel, R.C., et al., "Effect of Intracoronary Recombinant Human Vascular Endothelial Growth Factor on Myocardial Perfusion," <i>Journal of The American Heart Association</i> , 101(2):118-121, (2000).
AS	Aoki, M., et al., "Angiogenesis induced by hepatocyte growth factor in non-infarcted myocardium and infarcted myocardium: up-regulation of essential transcription factor for angiogenesis, etc," <i>Gene Therapy</i> , 7(5):417-427, (2000).
AT	Pecher, P., and Schumacher, B.A., "Angiogenesis in Ischemic Human Myocardium: Clinical Results After 3 Years," <i>The Annals of Thoracic Surgery</i> , 69(5):1414-1419, (2000).
AU	Kawasaji, M., et al., "Therapeutic Angiogenesis With Intramyocardial Administration of Basic Fibroblast Growth Factor," <i>The Annals of Thoracic Surgery</i> , 69(4):1155-1161, (2000).
AV	Rosengart, T.K., et al., "Six-Month Assessment of a Phase I Trial of Angiogenic Gene Therapy for the Treatment of Coronary Artery Disease Using Direct Intramyocardial Administration of an Adenovirus Vector Expressing the VEGF121 cDNA," <i>Annals of Surgery</i> , 230(4):466-472, (1999).
AW	Laham, R.J., et al., "Intracoronary and Intravenous Administration of Basic Fibroblast Growth Factor: Myocardial and Tissue Distribution," <i>Drug Metabolism and Disposition</i> , 27(7):821-826, (1999).
AX	Sellke, F.W., et al., "Therapeutic Angiogenesis With Basic Fibroblast Growth Factor: Technique and Early Results," <i>The Annals of Thoracic Surgery</i> , 65(6):1540-1544, (1998).
AY	Folkman, J., "Angiogenic Therapy of the Human Heart," <i>Journal of The American Heart Association</i> , 97(7):628-629, (1998).
AZ	McKenna, C.J., et al., "Selective ET <sub>A</sub> Receptor Antagonism Reduces Neointimal Hyperplasia in a Porcine Coronary Stent Model," <i>Journal of The American Heart Association</i> , 97(25):2551-2556, (1998).

EXAMINER

DATE CONSIDERED

PTO-1449 REPRODUCED  INFORMATION DISCLOSURE CITATION IN AN APPLICATION  October 25, 2001  (Use several sheets if necessary)		ATTORNEY DOCKET NO. 3033.1000-001	APPLICATION NO. 09/904,090
		APPLICANT Darrell H. Carney	
		FILING DATE July 12, 2001	GROUP 1646



## U. S. PATENT DOCUMENTS

EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	RECEIVED NAME DEC 14 2001 TECH CENTER 1600/2900	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES      NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AR2	Frimerman, A., et al., "Chimeric DNA-RNA Hammerhead Ribozyme to Proliferating Cell Nuclear Antigen Reduces Stent-Induced Stenosis in a Porcine Coronary Model," <i>Journal of The American Heart Association</i> , 99(5):697-703, (1999).
AS2	Voisard, R., et al., "High-dose diltiazem prevents migration and proliferation of vascular smooth muscle cells in various in-vitro models of human coronary restenosis," <i>Coronary Artery Disease</i> , 8(3/4):189-201, (1997).
AT2	Nadir, M., et al., "Inhibition of coronary restenosis by antithrombin III in atherosclerotic swine," <i>Coronary Artery Disease</i> , 7(11):851-861, (1996).
AU2	Munro, E., et al., "Inhibition of human vascular smooth muscle cell proliferation by lovastatin: the role of isoprenoid intermediates of cholesterol synthesis," <i>European Journal of Clinical Investigation</i> , 24(11):766-772, (1994).
AV2	Chen, S.J., et al., "Mithramycin Inhibits Myointimal Proliferation After Balloon Injury of the Rat Carotid Artery In Vivo," <i>Circulation</i> , 90(5):2468-2473, (1994).
AW2	Shi, Y., et al., "Downregulation of c-myc Expression by Antisense Oligonucleotides Inhibits Proliferation of Human Smooth Muscle Cells," <i>Circulation</i> , 88(3):1190-1195, (1993).
AX2	Speir, E., and Epstein, S.E., "Inhibition of Smooth Muscle Cell Proliferation by an Antisense Oligodeoxynucleotide Targeting the Messenger RNA Encoding Proliferating Cell Nuclear Antigen," <i>Circulation</i> , 86(2):538-547, (1992).
AY2	Stiernberg, J., et al., "The Role of Thrombin and Thrombin Receptor Activating Peptide (TRAP-508) in Initiation of Tissue Repair," <i>Thrombosis and Haemostasis</i> , 70(1):158-162, (1995).

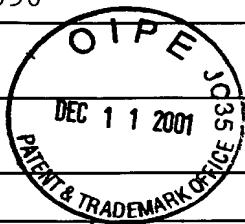
EXAMINER	DATE CONSIDERED

PTO-1449 REPRODUCED

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION  
October 25, 2001  
(Use several sheets if necessary)

ATTORNEY DOCKET NO.  
3033.1000-001APPLICATION NO.  
09/904,090APPLICANT  
Darrell H. CarneyFILING DATE  
July 12, 2001GROUP  
1646

DEC 11 2001



## U.S. PATENT DOCUMENTS

EXAM- INER INI- TIAL		DOCUMENT NUMBER	DATE	RECEIVED	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
				DEC 14 2001			
				TECH CENTER 1600/2900			

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES      NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AZ2	Carney, D.H., et al., "Enhancement of Incisional Wound Healing and Neovascularization in Normal Rats by Thrombin and Synthetic Thrombin Receptor-activating Peptides," <i>J. Clin. Invest.</i> , 89:1469-1477, (1992).
AR3	Carney, D.H., et al., "Role of High-Affinity Thrombin Receptors in Postclotting Cellular Effects of Thrombin," <i>Seminars in Thrombosis and Hemostasis</i> , 18(1):91-102, (1992).
AS3	Stiernberg, J., et al., "Acceleration of full-thickness wound healing in normal rats by the synthetic thrombin peptide, TP508," <i>Wound Repair and Regeneration</i> , 8(3):204-215, (2000).
AT3	Glenn, K.C., et al., "Synthetic Peptides Bind to High-Affinity Thrombin Receptors and Modulate Thrombin Mitogenesis," <i>Peptide Research</i> , 1(2):65-73, (1988).
AU3	Sower, L.E., et al., "Thrombin Peptide, TP508, Induces Differential Gene Expression in Fibroblasts through a Nonproteolytic Activation Pathway," <i>Experimental Cell Research</i> , 247:422-431, (1999).
AV3	Carney, D.H., "Postclotting Cellular Effects of Thrombin Mediated by Interaction with High-Affinity Thrombin Receptors," <i>Thrombin: Structure and Function</i> , Chapter 10, pp. 351-396, (1992).

EXAMINER

DATE CONSIDERED